



Indiana Department of Environmental Management
Office of Air Quality
Rule Fact Sheet
February 6, 2002

**Emission Control Limits For Commercial Industrial Solid Waste Incinerators
#01-375(APCB) / LSA Document #01-375**

Overview

Adds 326 IAC 11-8 concerning emission control limits for commercial and industrial solid waste incineration (CISWI) units. This rule incorporates federal air emissions requirements for solid waste incineration units that burn commercial and industrial waste.

Citations Affected

Adds 326 IAC 11-8.

Affected Persons

This rule affects units of all sizes whose primary purpose is the incineration of commercial and industrial nonhazardous solid waste. In addition, an exemption for pathological waste incinerators, agricultural waste incinerators, and municipal waste combustion units is conditioned upon the source meeting notification and recordkeeping requirements.

Potential Cost

This state rulemaking will not create costs above those created by the federal requirements.

Outreach

Sources identified by IDEM as being affected by this rulemaking received a mailing containing the Second Notice of Comment Period.

Description

This rule incorporates federal air emission requirements for solid waste incineration units that burn commercial and industrial waste. On December 1, 2000, U.S. EPA published a final rule establishing new source performance standards (NSPS) for new sources and emission guidelines for existing sources (65 FR 75338). New units are those that commenced construction after November 30, 1999, or commenced reconstruction or modification on or after June 1, 2001. Existing sources are those that commenced construction before November 30, 1999. Section 129 of the Clean Air Act (CAA) requires U.S. EPA to use maximum achievable control technology (MACT) in developing these standards.

Federal law requires states to adopt requirements at least as stringent as the federal emission guidelines for existing CISWI units. IDEM initiated this rulemaking to establish emission standards consistent with those of U.S. EPA's final rule. This rule will provide the legal mechanism to implement the emission guidelines and will be part of the state plan that IDEM will submit to U.S. EPA for approval, as required by Sections 111(d) and 129 of the CAA.

The federal rule applies to units of all sizes whose primary purpose is the incineration of commercial and industrial non-hazardous solid

waste. This rule does not apply to units that recover energy generated from the combustion process. Air curtain destructors/incinerators are also regulated by this rule. However, as long as the air curtain destructor/incinerator is burning one hundred percent (100 %) wood waste, clean lumber, yard waste, or any combination thereof, the unit needs only to comply with an initial and subsequent annual opacity test.

The following types of incinerators are exempt from this rule:

- C Pathological waste
- C Agricultural waste
- C Municipal waste combustors
- C Medical waste
- C Small power production units
- C Cogeneration units
- C Hazardous waste
- C Metal recovery units
- C Rack, part, and drum reclamation units
- C Cement kilns
- C Chemical recovery units
- C Laboratory analysis

Many of these sources are exempt because they are regulated by other federal regulations or will be regulated in the future. The exemption for pathological waste incinerators, agricultural waste incinerators, and municipal waste combustion units is conditioned upon the source meeting notification and recordkeeping requirements. The owner or operator of the unit is required to notify IDEM that the unit qualifies for the exemption and keep records on the amount of applicable waste burned in the unit. Incinerators burning ninety percent (90%) or more by weight of pathological waste, low level radioactive waste, and/or chemotherapeutic waste are exempt. Crematories or units burning animal remains would be considered pathological incinerators. Incinerators burning ninety percent 90% or more by weight of

agricultural waste are exempt. The notification requirement for municipal combustors applies to smaller units not already subject to a section 129(d) solid waste combustion rule. The notification applies to units burning more than thirty percent (30 %) municipal solid waste, such as an incinerator at a retail store.

The federal rule establishes emission limits for cadmium (Cd), carbon monoxide (CO), dioxins and dibenzofurans (dioxins/furans), hydrogen chloride (HCl), lead (Pb), mercury (Hg), opacity, oxides of nitrogen (NOx), particulate matter (PM), and sulfur dioxide (SO₂). The rule also establishes requirements for operator training and qualifications, waste management plans, and testing and monitoring requirements. The waste management plan is a written plan that identifies both the feasibility and the methods used to reduce or separate certain components of solid waste from the waste stream in order to reduce or eliminate toxic emissions from incinerated waste. An initial stack test is required for all pollutants with emission limits and annual stack tests are required for PM, HCl, and opacity. Sources have several options on how they can comply with this rule. Sources are also required to continuously monitor operating parameters to ensure continuous compliance with the emission limits. Units not already operating pursuant to a Title V permit will be required to submit an application for a Title V permit within one (1) year from the effective date of this rule, or December 1, 2003, whichever is earlier.

IDEM estimates that there are between ten (10) and twenty (20) affected CISWI units in Indiana that must comply with all the applicable requirements of this rulemaking. Additionally, thirty (30) to forty (40) air curtain incinerators in Indiana will be subject to the opacity requirements. Many sources will be required to notify IDEM that they are exempt from this

rule and some will need to keep records to prove they are exempt.

In lieu of compliance with the rule, sources may choose to shut down and use other waste disposal options, such as sending waste off-site to a commercial incinerator. Most incinerators, excluding the air curtain incinerators, that continue to operate will need to install add-on air pollution control devices to meet the emission limits. Although the rule does not require the use of a specific type of control device, the MACT emission limits were determined based on the performance of wet scrubbing systems on CISWI units.

Sources have two options for compliance dates. The first option is to come into compliance or shut down within one year after the effective date of this rule. The second option gives an extended compliance deadline of September 2005, if the source complies with two (2) increments of progress. The first increment requires the source to submit a final control plan to the state describing what air pollution controls or process changes will be made in order to meet the emission limits.

The second increment is achieving final compliance, which means if the unit is brought online, all necessary process changes and air pollution control devices would operate as designed. The source has one hundred eighty (180) days after final compliance to conduct the initial performance test. Sources are required to meet the emission limits on the date the initial performance test is required or completed, whichever date is earlier.

Sources that need an extension for shutdown are allowed to submit a closure notification at the time of the final control plan is due, but must include documentation on why additional time beyond the one (1) year allowed in the rule is

necessary. Even if sources request an extension of the closure date, the waste management plan is due one (1) year after the effective date of the state rule.

Consideration of Factors Outlined in Indiana Code 13-14-8-4

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account the following:

- 1) All existing physical conditions and the character of the area affected.
- 2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.
- 3) Zoning classifications.
- 4) The nature of the existing air quality or existing water quality, as appropriate.
- 5) Technical feasibility, including the quality conditions that could reasonably be achieved through coordinated control of all factors affecting the quality.
- 6) Economic reasonableness of measuring or reducing any particular type of pollution.
- 7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to:
 - (A) human, plant, animal, or aquatic life; or
 - (B) the reasonable enjoyment of life and property.

Consistency with Federal Requirements

The new rule is consistent with federal requirements.

IDEM Contact

Additional information regarding this rulemaking action can be obtained by calling (800) 451-6027 (in Indiana), press 0 and ask for Gayla Killough, Rule Development Section, Office of Air Quality, (or extension 3-8628) or dial (317) 233-8628.